

Play:	407	Cowlitz-Spencer Gas	
Province:	4	Western Oregon - Washington	
Geologist:	Johnson, S.Y.		Status: confirmed

Play Attributes: Probability of Occurrence

Charge	1.00
Reservoir rock	1.00
Traps	1.00
Play Probability	1.00

Size of Undiscovered Accumulations (>1 MMBOE) (Conditional):

	<u>Oil Accumulations</u>	<u>Gas Accumulations</u>	
Median	MMBO	8	BCFG
F5 of Largest Accumulation	MMBO	150	BCFG
TSP Shape Factor		7	
Mean (calculated)	MMBO	14.6	BCFG

Number of Undiscovered Accumulations (>1 MMBOE) (Conditional):

	<u>Oil Accumulations</u>	<u>Gas Accumulations</u>
Minimum	0	1
Median	0	10
Maximum	0	80
Mean (calculated)	0.0	22.7

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Ratio of Associated-Dissolved Gas to Oil:	CFG/bbl
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Ratio of NGL to Non-Associated Gas:	0 bbl/MMCF
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Ratio of NGL to Associated-Dissolved Gas:	bbl/MMCF
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API Gravity (degrees):	<u>minimum</u>	<u>mean</u>	<u>maximum</u>
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Depth of Oil Accumulations (ft):	<u>minimum</u>	<u>median</u>	<u>maximum</u>
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Depth of N-A Gas Accumulations (ft):	<u>minimum</u>	<u>median</u>	<u>maximum</u>
	1,500	2,500	10,000

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Estimated Resources:

Oil (MMBO)

<u>F99</u>	<u>F95</u>	<u>F75</u>	<u>F50</u>	<u>F25</u>	<u>F5</u>	<u>F1</u>	<u>mean</u>	<u>s.d.</u>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NGL (MMBNGL)

<u>F99</u>	<u>F95</u>	<u>F75</u>	<u>F50</u>	<u>F25</u>	<u>F5</u>	<u>F1</u>	<u>mean</u>	<u>s.d.</u>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Associated-Dissolved Gas (BCFG)

<u>F99</u>	<u>F95</u>	<u>F75</u>	<u>F50</u>	<u>F25</u>	<u>F5</u>	<u>F1</u>	<u>mean</u>	<u>s.d.</u>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Non-Associated Gas (BCFG)

<u>F99</u>	<u>F95</u>	<u>F75</u>	<u>F50</u>	<u>F25</u>	<u>F5</u>	<u>F1</u>	<u>mean</u>	<u>s.d.</u>
7.00	19.70	71.50	183.40	525.30	1,019.20	1,336.10	331.10	340.00